

PowerPC Network Traffic

Sniffer on parameter page call-up

Thu, Sep 28, 2000

Using a Sniffer, we monitored network traffic during callup of a Parameter Page display on a Macintosh. The page included 13 channels of signals from node 0619, a PowerPC node, and 2 channels each from IRM nodes 0571 and 0509. For such a request, the PPC node must act as a server, using multicast to forward the request to other nodes. As partial replies arrive from 0571 and 0509, they are incorporated to build the full reply to the Mac. The request types as follows:

Name	Function
Desc	Analog descriptors
Names	D0-style 16-character names
Slow	Slow data (1 Hz) for nominal, tolerances, flags, associated status
Fast	Readings and settings (15 Hz)
-MC	Forward multicast request
-rpy	Reply to previous request

Time(ms)	Delta	Transaction	List#	Length
0	—	Desc	988	88
0.4	0.4	Desc-MC	B9	36
0.9	0.5	Names	989	88
1.2	0.3	Names-MC	C1	36
1.6	0.4	Desc-509-rpy	B9	144
1.7	0.1	Desc-571-rpy	B9	144
2.2	1.5	Desc-rpy	988	1104
2.8	0.6	Names-571-rpy	C1	48
2.9	0.1	Names-509-rpy	C1	48
3.0	0.1	Cancel-MC	B9	
3.2	0.2	Names-rpy	989	288
22.1	18.9	Slow	98A	94
22.3	0.3	Names-C, Slow-MC	C1,C9	52
22.9	0.6	Fast	98B	90
23.2	0.3	Fast-MC	D1	38
23.4	0.2	Slow-571-rpy	C9	32
23.5	0.1	Slow-509-rpy	C9	32
23.9	0.4	Slow-rpy	98A	152
24.3	0.4	Fast-571-rpy	D1	24
24.4	0.1	Fast-509-rpy	D1	24
24.7	0.3	Fast-rpy	98B	84
27.0	2.3	Fast-571-rpy	D1	24
63.1	36.1	Fast-509-rpy	D1	24
65.2	2.1	Fast-rpy	98B	84
93.7	28.5	Fast-571-rpy	D1	24
129.8	36.1	Fast-509-rpy	D1	24
131.9	2.1	Fast-rpy	98B	84